STATEMENT UNDER ARTICLE 19

According to the invention the glass sheet is transferred from the rollers on the ring mould by maintaining horizontally the original height level of the glass. The whole roller system is utilized and air flow supporting begins until after the last roller. The solution according the cited publication US 4,778,508 presents that the glass is elevated already from the rollers, transferred forward in the elevated position and lowered on the ring mould when it is transported in elevated position above the mould.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 9 October 2003 (09.10.2003)

PCT

(10) International Publication Number WO 03/082754 A1

(51) International Patent Classification⁷: C03B 23/025, 35/24

(21) International Application Number: PCT/FI03/00252

(22) International Filing Date: 2 April 2003 (02.04.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 20020632

3 April 2002 (03.04.2002)

(71) Applicant (for all designated States except US): FERACI-TAS OY [FI/FI]; Kemiankatu 10, FIN-33720 Tampere (FI).

(72) Inventor; and

(75) Inventor/Applicant (for US only): NIKANDER, Risto [FI/FI]; Kemiankatu 10, FIN-33720 Tampere (FI).

(74) Agent: NIEMINEN, Taisto; Patenttitoimisto T Nieminen Oy, Kehräsaari B, FIN-33200 Tampere (FI).

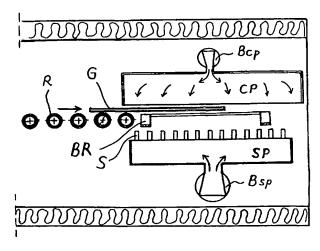
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- with amended claims and statement

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND EQUIPMENT FOR BENDING AND TEMPERING OF GLASS



(57) Abstract: Method and equipment for glass (G) bending and tempering, in which the glass is first heated in oven in to bending temperature and it is moved over known transfer means, like rotating rollers (R) and after the glass has reached bending temperature it is transferred in to bending section, in which the glass (G) is allowed to bend on special bending ring (BR) and the said transferring the glass onto the bending ring (BR) takes place by moving the glass horizontally by transfer force exerted onto it. When the glass arrives into the location of the bending ring (BR), the supporting the glass from below is changed into air flow directed onto the bottom surface of the glass and the glass elevation plane is maintained by forming planar glass lifting stop means (CP) above the glass and at the location of the bending ring (BR) and blowing air through the lifting stop means so that air film is formed in between the glass and glass lifting stopping means, preventing glass lifting and eliminating touching of the glass with lifting stop means and when the glass has arrived over the mould (BR), the blowing from below the glass is stopped and the glass is allowed to bend.



VO 03/082754